

MATERIAL SAFETY DATA SHEET

RAIN-X® ANTI-FOG™

1. PRODUCT AND COMPANY IDENTIFICATION

MSDS Number: 15523

Version Date: 09/06/02

Product Name: RAIN-X® ANTI-FOG™

Product Use: Interior glass antifog treatment

Synonyms: AF21101-24, AF21106, AF21201-24, AF21206, AF21212, AF21296, AF21412, AF21112, AF21212CN, BCAF21112, BCAF21212CN

Company Information

SOPUS Products

P.O. Box 4427

Houston, TX 77210-4427

USA

Phone Numbers

Medical Emergency: 1-800-546-6040

Transportation Emergency (USA): 1-800-424-9300

Transportation Emergency (International):
1-703-527-3887 (Call collect)

MSDS Assistance: 1-800-546-6227

Fax On Demand: 1-800-546-6227

Technical Assistance: 1-800-416-1600

Customer Service: 1-800-416-1600

Fax Number: 713-217-3181

Internet Address: www.MSDS.PZLQS.com

2. COMPONENT INFORMATION

Component	CAS No.	Weight Percent Range	Hazardous in Blend
ETHYL ALCOHOL	64-17-5	70 - 99	Yes
ISOPROPYL ALCOHOL	67-63-0	0 - 15	Yes
SURFACTANTS	MIXTURE	1 - 5	No

This product meets the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Hazards:

Flammable/Combustible X **Acute Toxin** X **Chronic Toxin** - **Carcinogen** -
Pressure - **Reactive** - **Exposure Limit** X **Target Organ** - **Other** -

Other: No information available

3. HAZARDS IDENTIFICATION

Emergency and Hazards Overview

CAUTION: FLAMMABLE. EYE IRRITANT.

NFPA Ratings: Health 1 Flammability 3 Reactivity 0

Primary Route of Exposure: Skin X Inhalation - Eye -

Health Effect Information

Eye Contact: Avoid eye contact. This product is moderately to severely irritating to the eyes upon direct contact. Based on testing of similar products and/or components. Exposure to high concentrations of vapors may be irritating to the eyes. These effects are transient, and complete recovery follows.

Skin Contact: Single, short exposures, as expected with consumer use of this product, are expected to be practically non-irritating to the skin. Prolonged or repeated skin contact may result in dryness, chapping, and reddening. May be absorbed through skin.

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Inhalation: This product is not expected to pose an inhalation hazard under conditions of foreseeable use. This product may be considered a low health hazard unless inhaled in very high concentrations. Exposure to vapors generated under unusual conditions may be mildly irritating to the nose and throat. Acute and chronic overexposures may be irritating to the respiratory tract.

Ingestion: Do not ingest. Can cause central nervous system (CNS) depression if ingested. Ingestion is expected to be relatively non-toxic unless aspiration occurs. Aspiration may lead to chemical pneumonitis which is characterized by pulmonary edema and hemorrhage and may be fatal. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discoloration of the skin. Coughing, choking, and gagging are often noted at the time of aspiration. Gastrointestinal discomfort may develop, followed by vomiting with a further risk of aspiration. Intentional misuse by deliberately ingesting can be harmful.

Medical Conditions Aggravated by Exposure: Drying and chapping may make the skin more susceptible to other irritants, sensitizers and disease.

Other: No information available

4. FIRST AID INFORMATION

Eye Contact: Immediately flush eyes with large amounts of water and continue flushing until irritation subsides. If irritation persists, seek medical attention.

Skin Contact: No treatment is necessary under ordinary circumstances. Wash thoroughly with water. If redness or irritation occurs and persists, seek medical attention. Use a hand or skin lotion to prevent dryness.

Inhalation: No treatment is necessary under ordinary circumstances. If victim exhibits signs of vapor intoxication remove to fresh air. If discomfort persists seek medical attention.

Ingestion: Do not induce vomiting due to aspiration hazard. If vomiting occurs lower head below knees to avoid aspiration. If victim exhibits signs of lung aspiration such as coughing or choking, seek immediate medical assistance.

Notes to Physician: No information available

Other: No information available

5. FIRE AND EXPLOSION INFORMATION

Flammable Properties

Flash Point: 65 F, 18.3 C

Test Method: T.O.C.

Flammable Limits in Air

Upper Percent: 12.7%

Lower Percent: 2%

Autoignition Temperature: No data available

Test Method: No information available

NFPA Classification: No information available

Extinguishing Media: Use water spray (fog), dry chemical, foam, or carbon dioxide.

Fire Fighting Measures

Special Fire Fighting Procedures and Equipment: No special fire fighting procedures are required. Water may be ineffective but can be used to cool containers exposed to heat or flame to prevent vapor pressure buildup and possible container rupture.

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Unusual Fire and Explosion Conditions: Dense smoke may be generated while burning. Carbon monoxide, carbon dioxide, and other oxides may be generated as products of combustion.

Hazardous Combustion By-Products: No information available

Other: No information available

6. ACCIDENTAL RELEASE MEASURES

Personnel Safeguards: Remove all sources of ignition. Provide adequate ventilation during clean-up. Consult Health Effect Information in Section 3, Personal Protection Information in Section 8, Fire and Explosion Information in Section 5, and Stability and Reactivity Information in Section 10.

Regulatory Notifications: No notification required

Containment and Clean up: No special cleanup procedures are necessary. Flush area with water to dilute. Small spills may be picked up with absorbent material.

Other: No information available

7. HANDLING AND STORAGE INFORMATION

Handling: All ignition sources in the area should be controlled. Do not open or use in unventilated, enclosed or confined spaces.

Storage: Store in a cool, well ventilated area in closed containers away from heat, sparks, open flame or oxidizing materials. Do not store at temperatures greater than 120 F. Do not transfer to unmarked containers.

Empty Container Warnings

Drums: Not applicable

Plastic: Do not reuse this container. Empty container may retain product residues.

Other: No information available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION INFORMATION

Exposure Limits and Guidelines

Component	CAS No.	Exposure Limit
ETHYL ALCOHOL	64-17-5	OSHA - PEL: TWA 1000 ppm ACGIH - TLV: TWA 1000 ppm
ISOPROPYL ALCOHOL	67-63-0	OSHA - PEL: TWA 400 ppm ACGIH - TLV: TWA 400 ppm ACGIH - TLV: STEL 500 ppm

Personal Protective Equipment

Eye/Face Protection: Eye protection is not required under conditions of normal use. If material is handled such that it could be splashed into eyes, wear plastic face shield or splash-proof safety goggles.

Skin Protection: Skin protection is not required under conditions of normal use. Launder soiled clothes.

Respiratory Protection: Respiratory protection is not required under conditions of normal use. If excessive levels of mists or vapors are generated while using this product, use an organic vapor respirator.

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Personal Hygiene: Consumption of food and beverage should be avoided in work areas where this product is present. Always wash hands and face with soap and water before eating, drinking, or smoking.

Engineering Controls / Work Practices

Ventilation: General room ventilation is normally sufficient to prevent buildup of hazardous concentrations. If product is used in enclosed or confined spaces, adequate ventilation must be provided to prevent buildup of vapors or mists.

Other: No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless	
Odor: Alcohol	Vapor Pressure: 33 mm Hg @ 77 F
Physical state: Liquid	Vapor Density (air=1): > 1
pH: No data available	Percent Volatile by Volume: 98
Boiling Point: 180 F, 82.2 C	Volatile Organic Content: No data available
Melting Point: No data available	Molecular Weight: No data available
Specific Gravity: 0.79	Average Carbon Number: No data available
Pour Point: No data available	Viscosity @ 100 F: No data available
	Viscosity @ 40 C: No data available
Solubility in Water: Soluble in water	
Octanol / Water Coefficient: Log K_{ow} = No data available	

10. STABILITY AND REACTIVITY INFORMATION

Chemical Stability: Stable

Conditions to Avoid: Keep away from heat, sparks, open flames and other ignition sources.

Incompatible Materials to Avoid: May react with strong oxidizing agents. Aldehydes, halogens and concentrated mineral acids. Strong bases.

Other: No information available

11. TOXICOLOGICAL INFORMATION

Primary Eye Irritation: No information available

Primary Skin Irritation: No information available

Acute Dermal Toxicity: No information available

Subacute Dermal Toxicity: No information available

Dermal Sensitization: No information available

Inhalation Toxicity: No information available

Inhalation Sensitization: No information available

Oral Toxicity: No information available

Mutagenicity: No information available

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Carcinogenicity: No information available

Reproductive and Developmental Toxicity: No information available

Teratogenicity: No information available

Immunotoxicity: No information available

Neurotoxicity: No information available

Other: No information available

12. ECOLOGICAL INFORMATION

Aquatic Toxicity: No information available

Terrestrial Toxicity: No information available

Chemical Fate and Transport: No information available

Other: No information available

13. DISPOSAL INFORMATION

Regulatory Information: Dispose of residual products and empty containers responsibly.

Waste Disposal Methods: Waste material may be landfilled or incinerated at an approved facility.

Other: No information available

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation (DOT)

Highway / Rail (Bulk): NOT APPLICABLE

Highway / Rail (Non-Bulk): CONSUMER COMMODITY, ORM-D

For US shipments, US DOT law requires the shipper to determine the proper shipping description of the material that is being shipped. The shipping information and description contained in this section may not be suitable for all shipments of this material, but may help the shipper determine the proper shipping description for a particular shipment.

International Information

Vessel: IMDG Regulated: X **IMDG Not Regulated:** –

Air: ICAO Regulated: X **ICAO Not Regulated:** –

Other: No information available

15. Regulatory Information

Regulatory Lists Searched: The components listed in Section 2 of this MSDS were compared to substances that appear on the following regulatory lists. Each list is numerically identified. See Regulatory Search Results below.

Health & Safety: 10 - IARC carcinogen, 11 - NTP carcinogen, 12 - OSHA carcinogen, 15 - ACGIH TLV, 16 - OSHA PEL, 17 - NIOSH exposure limit, 20 - US DOT Appendix A, Hazardous substances, 22 - FDA 21 CFR Total food additives, 23 - NFPA 49 or 325

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Environmental: 30 - CAA 1990 Hazardous air pollutants, 31 - CAA Ozone depletors, 33 - CAA HON rule, 34 - CAA Toxic substance for accidental release prevention, 35 - CAA Volatile organic compounds (VOC's) in SOCM, 41 - CERCLA / SARA Section 302 extremely hazardous substances, 42 - CERCLA / SARA Section 313 emissions reporting, 43 - CWA Hazardous substances, 44 - CWA Priority pollutants, 45 - CWA Toxic pollutants, 46 - EPA Proposed test rule for hazardous air pollutants, 47 - RCRA Basis for listing - Appendix VII, 48 - RCRA waste, 49 - SDWA - (S)MCLs

International: 50 - Canada - WHMIS Classification of substance, 54 - Mexico - Drinking water - ecological criteria, 55 - Mexico - Wastewater discharges, 56 - US -TSCA Section (12)(b) - export notification

State Lists: 60 - CA - Proposition 65, 61 - FL - Substances, 62 - MI - Critical materials, 63 - MA - RTK, 64 - MA - Extraordinarily hazardous substances, 65 - MN - Hazardous substances, 66 - PA - RTK, 67 - NJ - RTK, 68 - NJ - Environmental hazardous substances, 69 - NJ - Special hazardous substances

Inventories: 80 - Canada - Domestic substances , 81 - European - EINECS, 82 - Japan - ENCS, 83 - Korea - Existing and evaluated chemical substances, 84 - US - TSCA , 85 - China Inventory

Regulatory Search Results:

ETHYL ALCOHOL: 15, 16, 17, 22, 23, 35, 50, 61, 63, 65, 66, 67, 69, 80, 81, 82, 83, 84, 85

ISOPROPYL ALCOHOL: 15, 16, 17, 22, 23, 35, 42, 50, 61, 63, 65, 66, 67, 68, 69, 80, 81, 82, 83, 84, 85

U.S. TSCA Inventory: All components of this material are on the US TSCA Inventory.

SARA Section 313: Consumer products are not regulated under SARA, Title III, Section 313.

IARC: No information available

SARA 311 / 312 Categories

Acute: X **Chronic:** -- **Fire:** X **Pressure:** -- **Reactive:** --

Not Regulated: --

Canadian WHMIS Classification

Class B - Flammable and Combustible Material, Division 2, Flammable Liquids

Class D - Poisonous and infectious material, Division 2B, Toxic Material

European Union Classification

Hazard Symbols:

Highly flammable / F / flame in square.

Irritant / Xi / X in square.

Risk Phrases:

R11: Highly flammable.

R36: Irritating to eyes.

R67: Vapours may cause drowsiness and dizziness.

Safety Phrases:

S16: Keep away from sources of ignition - No smoking.

S2: Keep out of the reach of Children.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S7: Keep container tightly closed.

S25: Avoid contact with eyes.

S46: If swallowed, seek medical advice immediately and show this container or label.

Other: No information available

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16. OTHER INFORMATION

Health and Environmental Label Language

Front Label:

WARNING: FLAMMABLE. EYE IRRITANT.

Read carefully other cautions on back.

Back Label:

WARNING: Contains denatured alcohol.

PRECAUTIONARY MEASURES: Keep away from heat, sparks, flames and other ignition sources. Store below 120F. Avoid contact with eyes. FIRST AID: For contact with eyes, wash thoroughly with water and see physician if irritation persists.

Use only as directed. Intentional misuse by deliberately ingesting can be harmful.

KEEP OUT OF REACH OF CHILDREN.

MSDS Revisions

Previous Version Date: 09/06/02

Previous Version Information

Section 14 - Transportation Information Revised.

Other

No information available

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